

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10585500
Filing Date	2009-02-17
First Named Inventor	Kyung-Soo Jin
Art Unit	3739
Examiner Name	Brian Michael Antiskay
Attorney Docket Number	NEURP001

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	5038782		1991-08-13	GEVINS et al.	
	2	4949726		1990-08-21	HATZELL et al.	
	3	6254536		2001-07-03	DeVito	
	4	6609017		2003-08-19	SHENOY et al.	
	5	6636763		2003-10-21	JUNKER et al.	
	6	6731964		2004-05-04	SHENOY et al.	
	7	7058445		2006-06-06	KEMERE et al.	
	8	7127283		2006-10-24	Kageyama	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	10585500
	Filing Date	2009-02-17
	First Named Inventor	Kyung-Soo Jin
	Art Unit	3739
	Examiner Name	Brian Michael Antiskay
	Attorney Docket Number	NEURP001

9	6154669		2000-11-28	HUNTER et al.	
10	6381481		2002-04-30	LEVENDOWSKI et al.	
11	6574513		2003-06-03	COLLURA et al.	
12	2318207		1943-05-04	Francis C. Ellis	
13	4955388		1990-09-11	Richard B. Silberstein	
14	5339826		1994-08-23	SCHMIDT et al.	
15	4610259		1986-09-09	COHEN et al.	
16	3279468		1966-10-18	Sidney LeVine	
17	4608987		1986-09-02	Henry E. Miller	
18	6181974		2001-01-30	George E. Springer Jr.	
19	6353396		2002-03-05	Dan Atlas	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	10585500
	Filing Date	2009-02-17
	First Named Inventor	Kyung-Soo Jin
	Art Unit	3739
	Examiner Name	Brian Michael Antiskay
	Attorney Docket Number	NEURP001

If you wish to add additional U.S. Patent citation information please click the Add button.						Add
U.S.PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20020091335		2002-07-11	JOHN et al.	
	2	20010044573		2001-11-22	MANOLI et al.	
	3	20040122303		2004-06-24	KOPKE et al.	
	4	20070106169		2007-05-10	Kalford C. Fadem	
	5	20070225585		2007-09-27	WASHBON et al.	
	6	20050278009		2005-12-15	BONA et al.	
	7	20070238945		2007-10-11	DELIC et al.	
	8	20080281392		2008-11-13	PAOLIZZI et al.	
If you wish to add additional U.S. Published Application citation information please click the Add button.						Add
FOREIGN PATENT DOCUMENTS						Remove

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)			Application Number		10585500		
			Filing Date		2009-02-17		
			First Named Inventor		Kyung-Soo Jin		
			Art Unit			3739	
			Examiner Name		Brian Michael Antiskay		
			Attorney Docket Number			NEURP001	

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1	H07-27505U	JP		1995-05-23	Unknown	Abstract Included	<input type="checkbox"/>
	2	2002095637	JP		2002-04-02	Kireicom KK	Abstract Included	<input type="checkbox"/>
	3	2007109745	WO		2007-09-27	Emotiv Systems PTY LTD.		<input type="checkbox"/>
	4	1264575	EP		2002-12-11	Palmed GMBH	Abstract Included	<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button [Add](#)

NON-PATENT LITERATURE DOCUMENTS

[Remove](#)

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	PCT/US07/024662, International Search Report & Written Opinion, 4/24/2008	<input type="checkbox"/>
	2	VANRIJN et al., Low-Cost Active Electrode Improves the Resolution in Biopotential Recordings, IEEE Engineering in Medicine and Biology Society, 1996 18th Annual International Conference, pgs. 101-102	<input type="checkbox"/>
	3	MAKEIG et al., Changes in Alertness are a Principal Component of Variance in the EEG Spectrum, NeuroReport 1995	<input type="checkbox"/>
	4	MAKEIG et al., Independent Component Analysis of Electroencephalographic Data, Advances in Neural Information Processing Systems, pgs. 145-151, 1996.	<input type="checkbox"/>

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Not for submission under 37 CFR 1.99)</i>	Application Number		10585500
	Filing Date		2009-02-17
	First Named Inventor	Kyung-Soo Jin	
	Art Unit		3739
	Examiner Name	Brian Michael Antiskay	
	Attorney Docket Number	NEURP001	

	5	UNGUREANU et al., Independent Component Analysis Applied in Biomedical Signal Processing, Measurement Science Review, Volume 4, Section 2, 2004.	<input type="checkbox"/>
	6	BENCA et al., EEG Alpha Power and Alpha Power Asymmetry in Sleep and Wakefulness, pgs. 430 - 436, 1999.	<input type="checkbox"/>
	7	JOHN T.CACIOPPO, Feelings and Emotions: Roles for Electrophysiological Markers, pgs. 234-243, 2004.	<input type="checkbox"/>
	8	COAN et al., Frontal EEG Asymmetry as a Moderator and Mediator of Emotion, pgs. 7-49, 2004	<input type="checkbox"/>
	9	RANGANATH et al., Frontal EEG Alpha Asymmetry, Depression, and Cognitive Functioning, pgs. 449-478, 1998.	<input type="checkbox"/>
	10	HEBERT et al., Physiological Stress Response to Video-Game Playing: The Contribution of Built-In Music, pgs. 2371-2380, 2005.	<input type="checkbox"/>
	11	Annika S. Smit, Mental Effort Affects Vigilance Enduringly: After-Effects in EEG and Behavior, pgs. 239-243, April 21, 2004.	<input type="checkbox"/>
	12	WOLPAW et al., Brain-Computer Interfaces for Communication and Control, pgs. 767-791, 2002	<input type="checkbox"/>
	13	KAPLAN et al., Application of the Change-Point Analysis to the Investigation of the Brains's Electrical Activity, Chapter 7 in BRODSKY et al., Nonparametric Statistical Diagnosis: Problems and Methods, pgs. 333-388, 2000.	<input type="checkbox"/>
	14	KAPLAN et al., Probability Patterns of the Human EEG Narrow-Band Differential Spectra During Memory Processes, January 20, 1997.	<input type="checkbox"/>
	15	FINGELKURTS et al., The Regularities of the Discrete Nature of Multi-Variability of EEG Spectral Patterns, April 26, 2001.	<input type="checkbox"/>

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Not for submission under 37 CFR 1.99)</i>	Application Number	10585500
	Filing Date	2009-02-17
	First Named Inventor	Kyung-Soo Jin
	Art Unit	3739
	Examiner Name	Brian Michael Antiskay
	Attorney Docket Number	NEURP001

	16	SHISHKIN et al., Combining the Extremities on the Basis of Separation: A New Approach to EEG/ERP Source Localization, November 2004.	<input type="checkbox"/>
	17	KAPLAN et al., Macrostructural EEG Characterization Bases on NonParametric Change Point Segmentation: Application to Sleep Analysis, January 8, 2001.	<input type="checkbox"/>
	18	KAPLAN et al., Unconscious Operant Conditioning in the Paradigm of Brain-Computer Interface Based on Color Perception, June 29, 2004.	<input type="checkbox"/>
	19	LEVICHKINA et al., Unconscious Context Control of Visual Perception of Simple Stimuli: A Study Using Evoked Potentials, August 2, 2007.	<input type="checkbox"/>
	20	LANDA et al., A Model for the Speed of Memory Retrieval, Published October 21, 2003.	<input type="checkbox"/>
	21	KAPLAN et al., Nonstationary Nature of the Brain Activity as Revealed by EEG/MEG: Methodological, Practical and Conceptual Challenges, July 28, 2005	<input type="checkbox"/>
	22	A. KAPLAN, The Problem of Segmental Description of Human Electroencephalogram, March 18, 1998.	<input type="checkbox"/>
	23	BORISOV et al., Analysis of EEG Structural Synchrony in Adolescents with Schizophrenic Disorders, June 7, 2004.	<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button [Add](#)

EXAMINER SIGNATURE

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		10585500
	Filing Date		2009-02-17
	First Named Inventor		Kyung-Soo Jin
	Art Unit		3739
	Examiner Name		Brian Michael Antiskay
	Attorney Docket Number		NEURP001

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.
 The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
 A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Michael J. Schallop/	Date (YYYY-MM-DD)	2011-09-14
Name/Print	Michael J. Schallop	Registration Number	44319

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.